

SHADER EDITOR AND COMPILER

ABSTRACT

A software application that allows users to create
shader definitions using an intuitive graphical user
5 interface. The invention is characterized by an intuitive
user interface with a streamlined workflow that non-
technical users (artists) are able to understand and
utilize without the need to become technically proficient
in computer software expression. This interface allows the
10 user to create a shader graphically without writing code,
by wiring predefined filter, assembly and property
primitives together into a dynamic, directed wire graph. A
high level code definer writes an XML (for example) script
for the defined wire graph. The output produced by the
15 system is translated into a shader program implemented in a
format that is recognized by some other rendering system.
Typically this means a shader program represented as a text
file containing code in some specific shader language. The
system is able to generate output targeted for specific
20 platforms based on a single graphical representation of the
shader program created by the user.